STEM SPORTS EDUCATION

July 2025
Newsletter 1

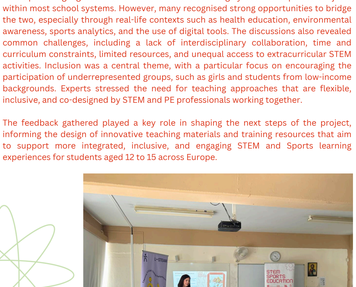
Innovating in the way STEM is taught through Sports in school education

The STEM Sports project introduces an innovative pedagogical approach, combining STEM competences with sports to cultivate key competences and promote physical activity, sports, and a healthy lifestyle. This multidisciplinary approach is particularly novel in the EU's secondary educational sector. The project aligns with the school education priority of 'Promoting interest and excellence in STEM' as it seeks to integrate STEM education with Sports through interdisciplinary teaching.

Kick off meeting

The kick-off meeting of the STEM Sports project took place on January 13th and 14th, 2025 in Nicosia, Cyprus and hosted by INQUIRIUM. The kickoff meeting included fruitful discussions and strategic planning. Partners came together to:

- Introduce the project partners and their roles.
- Discuss the project's objectives, deliverables, and timelines.
- Discuss the development of a pedagogical framework for STEM Sports Education.
- Explore the creation of an engaging toolkit with learning activities.
- Deliberate on the design of a comprehensive training program for educators.
- Map out the dissemination and communication strategies for the project's impact.



Mapping practical needs: local focus groups successfully completed in partner countries

As part of the STEM Sports Education project, focus groups were successfully carried out in Belgium, Cyprus, Italy and Catalonia. A total of 46 participants took part, representing a diverse mix of STEM and Physical Education teachers, researchers, school leaders and other education professionals. The aim was to explore how STEM and PE could be more meaningfully connected in schools and to identify practical needs and priorities for future project activities.

Participants highlighted that STEM and PE are still largely seen as separate subjects within most school systems. However, many recognised strong opportunities to bridge the two, especially through real-life contexts such as health education, environmental awareness, sports analytics, and the use of digital tools. The discussions also revealed common challenges, including a lack of interdisciplinary collaboration, time and curriculum constraints, limited resources, and unequal access to extracurricular STEM activities. Inclusion was a central theme, with a particular focus on encouraging the participation of underrepresented groups, such as girls and students from low-income backgrounds. Experts stressed the need for teaching approaches that are flexible, inclusive, and co-designed by STEM and PE professionals working together.

The feedback gathered played a key role in shaping the next steps of the project, informing the design of innovative teaching materials and training resources that aim to support more integrated, inclusive, and engaging STEM and Sports learning experiences for students aged 12 to 15 across Europe.

Our project featured at VUB International Days 2025

On Thursday, 22 May 2025, the STEM SPORTS Education project was proudly showcased at the Vrije Universiteit Brussel (VUB) main campus during the annual VUB International Days. This dynamic event brought together our national and international VUB community–students, academic staff, and researchers–as well as a diverse group of external stakeholders, including representatives from EPOS, the European Commission, Erasmushogeschool Brussel (EHB), VLIR-UOS, and Universidad de Manizales, among others.

Our project was presented during the Networking Walking Lunch (12:30–13:45), alongside other impactful VUB initiatives such as Erasmus+, UDC, and EUTOPIA. Visitors had the opportunity to explore our poster presentation, engage in discussions about the intersection of STEM and sports in education, and learn more about our goals and activities. The event attracted 62 participants in person, creating a vibrant and interactive atmosphere. It was followed by an Info Session on the Future of the Erasmus+ Programme (14:00–16:00), featuring insightful contributions from representatives of the European Commission and EPOS, who shared updates and perspectives on the evolving landscape of international education and mobility.

STEM SPORTS Education Erasmus project presented at LK Generations 2025 – VUB Etterbeek Campus

On Friday, May 23rd, the vibrant U-Residence at the Vrije Universiteit Brussel (VUB) Etterbeek Campus was buzzing with energy as the Faculty of Physical Education and Physiotherapy hosted its annual flagship networking event: LK Generations 2025. This year's edition brought together students, alumni, staff, and supporters for an evening filled with connection, celebration, and innovation. Among the highlights of the evening was the presentation of the STEM SPORTS Education Erasmus+ project, a forward-thinking initiative aimed at integrating STEM principles into sports education across Europe. Our team had the opportunity to showcase the project's goals, progress, and future impact to a diverse and enthusiastic audience. The presentation sparked engaging conversations and opened doors for potential collaborations with educators, researchers, and practitioners in the field.

Delivering impact

We are excited to announce that Deliverables 1 to 5 of Work Package 2 have been successfully completed and published on Zenodo. These foundational reports are shaping the future of STEM Sports Education across Europe.

R2.2 Mapping National and International Standards

This report reviews STEM and PE curricula across partner countries, identifying shared competencies and key themes such as technology use, health promotion, inclusion, and participatory methodologies. It also highlights barriers like resource limitations and social stereotypes, especially for underrepresented groups.

R2.3 Mapping Practical Needs

Based on local forums in each country, this report reveals how STEM and PE are often siloed in schools. However, it also uncovers exciting opportunities for integration–such as mathematizing physical activity and using engineering to enhance sports accessibility. It offers practical strategies like co-teaching and modular learning sequences to overcome challenges.

R2.4 Defining Themes and Learning Outcomes

This report outlines the core knowledge, skills, and attitudes that will guide the development of Teaching and Learning Sequences (TLSs). It emphasizes the importance of 21st-century skills and identifies four umbrella themes to meaningfully connect STEM and PE.

R2.5 STEM Sports Education pedagogical framework

This reports defines the conceptual and pedagogical framework for STEM Sports Education. This framework serves as the cornerstone for Work Package 3, where we co-created inclusive educational materials and teacher training programs for students aged 12 to 15.

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